



BANGALORE WATER SUPPLY AND SEWERAGE BOARD

CAUVERY BHAVAN, KEMPEGOWDA ROAD,
BANGALORE - 560 009

TENDER FOR THE WORK OF

**OPERATION AND MAINTENANCE OF EMF
FLOWMETERS AND ITS ALLIED WORKS INSTALLED IN
PHASE II NETWORK COMING UNDER AEE (UFW)-2
SUBDIVISION.**

**Office of the Engineer-in-Chief
BANGALORE WATER SUPPLY & SEWERAGE BOARD**

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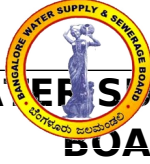
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Website - www.bwssb.org

TENDER REFERENCE :	:	BWSSB/EIC/ACE(UFW)/TA(UFW)/ 2407 /2025-26 Dt:25- 07- 2025
DATE OF PUBLICATION IN E- PORTAL	:	28/07/2025
LAST DATE FOR SUBMISSION OF TENDER IN E PORTAL	:	11/08/2025
TIME AND DATE OF OPENING OF TECHNICAL TENDER	:	12/08/2025
PLACE OF OPENING OF TECHINICAL TENDER	:	Office of the Engineer-in-Chief, 2 nd floor, Cauvery Bhavan, KG Road, Bangalore - 560 009
TIME AND DATE OF OPENING OF PRICE TENDERS	:	Will be intimated to the Qualified Tenderers
PLACE OF OPENING OF PRICE TENDER	:	Will be intimated to the Qualified Tenderers
ADDRESS FOR COMMUNICATION	:	Engineer-in-Chief 2 nd floor, Cauvery Bhavan, KG Road, Bangalore - 560 009 Telephone - 080 22945105 Telefax - 22945105 e-mail - eic@bwssb.gov.in

Contents

Section No.	Description	Page
1	INVITATION FOR TENDERS (IFT)	3
2	INSTRUCTIONS TO TENDERERS (ITT)	7
3.	QUALIFICATION INFORMATION	23
4.	FORM OF TENDER, LETTER OF ACCEPTANCE, NOTICE TO PROCEED WITH THE WORK AND AGREEMENT FORM	27
5.	CONDITIONS OF CONTRACT (CC)	31
6.	CONTRACT DATA	51
7	SPECIFICATIONS	55
8	DRAWINGS	106
9.	BILL OF QUANTITIES	107
10.	FORMAT OF BANK GUARANTEE FOR SECURITY DEPOSIT	108

SECTION 1:



BANGALORE WATER SUPPLY AND SEWERAGE BOARD

Office of the Engineer-in-Chief

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**INVITATION FOR TENDER – SHORT TERM
(ONLY THROUGH KPPP PORTAL)
www.kppp.karnataka.gov.in)**

IFT No.: BWSSB/EIC/ ACE(UFW/TA(UFW)/2407/2025-26
2025

Dated: 25-07-

1. The ***Engineer-in-Chief*** invites tender from eligible tenderers, for the construction of work detailed in the Table below through e-PROCUREMENT process with two stages tender procedure in line with the Rule 28 of the KTPP Act. The details regarding their qualification to take the tender (as detailed in ITT Clause 4) and the price tender shall be uploaded in the website of the e-procurement wizard. Technical details will be opened on the date and time mentioned in IFT clause 5 and evaluated. The price tender of the Tenderer, who is found to be qualified to execute the tendered works, will be opened on the date notified later. The Tenderers are advised to note the minimum qualification criteria specified in Clause 3 of the Instructions to Tenderers(ITT) to qualify for award of the contract.
2. Tender documents may be downloaded through the e-procurement wizard which will link to www.kppp.karnataka.govt.in from **28.07 .2025 to 11.08.2025**, on payment of a non-refundable fee indicated in the Table below, using any of these forms of OTC, NEFT, DEBIT CARD and CREDIT CARD through e-portal only. Interested tenderers may obtain further information at the Office of e-procurement. Tenderers will be issued a password and authorized for accessing the tender document in the website with URL: **www.kppp.karnataka.govt.in**

3. The Bidders can download the e-tender document using their user ID -password, by accessing **www.kppp.karnataka.govt.in** where electronic tender form is provided. Additional information related to e-tender process can be obtained through the above mentioned website. The electronic tender will be operated as Two stage Tender system by opening the Technical details first and financial portion of the eligible tenderers later.
4. Tenders must furnish Earnest Money Deposit specified for the work in the Table below. Earnest Money Deposit will have to be paid through any one of the forms OTC, NEFT, DEBIT CARD and CREDIT CARD through e-portal only.

Sl. No	Name of Work	Cost of Tender Document including Taxes Rs.	Amount put to Tender Rs. in Lakh (Approx) (Excluding GST)	Bid Security Rs. in Lakh	Period of completion	Eligibility Criteria during last 5 years (2020-21, 2021-22, 2022-23, 2023-24 & 2024-25)	
						Turnover (in all classes of Civil Engineering construction works) for any of the two years Rs. In Lakhs (Including GST)	Performance & Work Qualification in completed projects during last five financial years i.e. from 2020-2021 to 2024-2025
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Operation and maintenance of EMF Flowmeters and its allied works installed in Phase II network coming under AEE (UFW)-2 subdivision.	To be specified by e-procurement cell.	398.45	5.98	12 months (Including monsoon period)	940.35	i) as prime contractor should have satisfactorily completed during the last five years at least one similar work to an extent of 50% of the cost of the work value not less than Rs.235.08 lakhs (EMF flowmeters and its allied works completed in all respects) ii) Executed in any one year, the following minimum quantities of work: a) repair or replacement of flowmeter panels -

Contractor
Employer

							120 Nos. b) Providing and fixing of Steel work Framed work – 3600Kgs. c) MS specials for 500mm and above – 9600 Kgs. e) Tenderer should upload the OEM manufacturer authorization letter for O&M flowmeter spares compatibility and availability. (iii) Liquid assets and or availability of credit facilities of no less than Rs. 119.54 lakhs.
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5. The last date for uploading of completed tender document is **on 11/08 /2025 upto 15.00 hrs.**
6. The bids will be opened at the office mentioned in para no.12 on **12 / 08/2025 at 16:00 hrs** in the presence of bidders or their authorized representatives. If the bid opening day remains as public holiday, Bids will be opened on the next working day at the original stipulated time.
7. Bidders can access tender documents from the website and upload the required details; those are mentioned in different sections in the bid document in to electronic tender box on the website. Scanned documents those are required to be furnished as per Section 2, 3 & 4 of the bid document shall be submitted through e-portal preferably in **PDF** format for clear vision.
8. The cost of the tender document once paid will not be refunded.
9. The successful bidder would be required to give performance **bank guarantee of 5%** of the contract amount plus additional security for unbalanced bid amount from a Nationalized / Scheduled Indian Bank, with jurisdiction at Bangalore as specified in the clause no.29 of ITT, towards guarantee for completion of work within the stipulated period.
10. Applications / requisitions from joint venture Firms are not acceptable.

11. Bangalore Water Supply and Sewerage Board reserve the right to cancel or annul the entire or part of this process of invitation at any time without assigning any reason.
12. For any additional information regarding the above tender, the firms who are interested to quote, may contact office of the undersigned at the office address given below on all working days during office hours 1030hours to 1700 hours.

Engineer-in-Chief

Bangalore Water Supply and Sewerage Board
2rd Floor, Cauvery Bhavan, Kempe Gowda Road, Bangalore -
560009

Karnataka, India.

Tel Fax: -91-80-22945105

Telephone: +91-80- 22945105

Or visit Website www.bwssb.gov.in

Email eic@bwssb.gov.in

1. List of documents to support qualification of bidder is to be uploaded to the e-procurement website www.kppp.karnataka.gov.in
2. Bidders shall submit offers that comply with the requirements of the bid document, **including the basic technical design as indicated in the drawing and specifications**. Alternatives will not be considered. The attention of the bidders is drawn to clause 23 regarding the rejection of the bids, which are not substantially responsive to the requirement of the bid document.
3. Other details can be read from the tender documents.
4. Corrigendum/Addendum/Modification/corrections, if any, will be published in the Web site only.

Engineer-in-Chief

Bangalore Water supply & Sewerage
Board

SECTION 2:
INSTRUCTIONS TO TENDERERS (ITT)

Table of Clauses

	Page No.
A. General	
1. Scope of Tender	9
2. Eligible Tenderers	9
3. Qualification of the Tenderer	9
1 4. One Tender per Tenderer	11
2 5. Cost of Tendering	11
3 6. Site Visit	11
B. Tender Documents	
1 7. Content of Tender documents	11
2 8. Clarification of Tender Document	11
9. Amendment of Tender documents	12
C. Preparation of Tenders	
10. Documents comprising the Tender	12
11. Tender prices	13
12. Tender validity	13
13. Earnest money deposit	14
14. Format and signing of Tender	14
D. Submission of Tenders	
15. Sealing and marking of Tenders	15
16. Deadline for submission of Tenders	16
1 17. Late Tenders	16
18. Modification and Withdrawal of Tenders	16
E. Tender opening and evaluation	
1 19. Opening of First Cover of all Tenders and evaluation to determine qualified Tenderers	17
20. Opening of Second Cover Tenders of qualified Tenders and evaluation	17
21. Process to be confidential	18
22. Clarification of Tenders	18
23. Examination of Tenders and determination of responsiveness	19
24. Correction of errors	19
25. Evaluation and comparison of Tenders	19
F. Award of contract	
26. Award criteria	20
27. Employer's right to accept any Tender and to reject any or all Tenders	20
28. Notification of award and signing of Agreement	20
29. Security deposit	21
30. Advance payment and Security	21
31. Corrupt or Fraudulent Practices	21

A. General

1. Scope of Tender

- 1.1 The **Engineer-in-Chief, BWSSB**, (Referred to as Employer in these documents) invites tenders following Two Cover e-procurement procedure, from eligible Tenderers, for the construction of work (as defined in these documents and referred to as "the work") detailed in the Table given in the Invitation for Tenders (IFT).

2. Eligible Tenderers

- 2.1 Tenderers shall not be under a declaration of ineligibility for corrupt and fraudulent practices issued by the Government of Karnataka
- 2.2 Tenders from joint ventures are not acceptable.

3. Qualification of the Tenderer:

- 1 3.1 All Tenderers shall provide the requested information accurately and in sufficient detail in Section 3: Qualification information.
- 2 3.2 Should have Civil/Electrical Contractor registration in BWSSB or PWD/KUWSSB/KPTCL/CPWD/CEIG etc.,

1 3.2 To qualify for award of this contract, each Tenderer in its name should have in the last five years i.e. 2020-21 to 2024-25)

2

1. Should have achieved in at least two financial years a minimum financial turnover (in all classes of civil engineering construction works) of **940.35 Lakhs (Including GST)**
2. The Tenderer as prime contractor should have satisfactorily completed during the last five years at least one similar work to an extent of 50% of the cost of the work value not less than **Rs.235.08 lakhs (Including GST)** (Supply, installation of bulk flowmeters, spares also work-related bulk flowmeter)
3. Executed in any one year, the following minimum quantities of work:
 - a. Repair or replacement of flowmeter panels – **120 Nos**
 - b. Providing and fixing of steel work Framed Work – **3600Kgs.**
 - c. MS specials for 500mm and above – **9600 Kgs**
 - d. At least 1 similar O&M works in hand of Bulk flowmeters

Note: Work done certificate for the works containing above specifications along with BOQ item, Bill copy needs to be submitted by the tenderer for verification. Above specifications in single work or in different works, both are accepted.

4. Tenderer should upload the OEM manufacturer authorization letter for O&M flowmeter spares compatibility and availability.

3.3 Each Tenderer should further demonstrate:

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Each Tenderer should further demonstrate:

- a. Availability by owning 50% of the required / specified key & critical equipment for this work & remaining 50% can be deployed on lease / hire basis for all works provided, the relevant documents (commitment agreements etc.,) for availability for this work shall be furnished. Some of the equipments are as follows:

- i. Welding machine - 2 nos.
- ii. Portable clamp on meter for testing Set. - 1
- iii. Drilling Machine - 2 nos.
- vi. Multimeter and testing equipments - 2 nos.

[In case of hiring, agreement copy for such arrangement shall be furnished]

- b. Liquid assets and /or availability of credit facilities of no less than **Rs.58.77 lakhs/- (Including GST)** (Credit lines/letter of credit/certificates from Nationalized / Schedule banks in India for meeting the fund requirement etc.,

- 3.4 To qualify for a package of contracts made up of this and other contracts for which tenders are invited in this IFT, the Tenderer must demonstrate having experience and resources to meet the aggregate of the qualifying criteria for the individual contracts.

- 3.5 Sub-contractors' experience and resources shall not be taken into account in determining the Tenderer's compliance with the qualifying criteria except to the extent stated in 3.2 (d) and (e) above.

- 1 3.6 Tenderers who meet the above specified minimum qualifying criteria, will only be qualified, if their available tender capacity is more than the total tender value. **(Rs.470.18 Lakhs) (Including GST)**.The available tender capacity will be calculated as under:

$$\text{Assessed available tender capacity} = (A * N * 1.5 - B)$$

where

A = Maximum value of civil engineering works executed in any one year during the last five years (updated to **2024-25** price level) taking into account the completed as well as works in progress.

N = Number of years prescribed for completion of the works for which tenders are invited.

B = Value, at **2024-25** price level, of existing commitments and on-going works to be completed during the next **1** years (period of completion of the works for which Tenders are invited)*

Note: The statements showing the value of existing commitments and on-going works as well as the stipulated period of completion remaining for each of the works listed should be countersigned by the Employer in charge, not below the rank of an Executive Engineer or equivalent.

3.7 Even though the Tenderers meet the above criteria, they are subject to be disqualified if they have:

- made misleading or false representations in the forms, statements and attachments submitted in proof of the qualification requirements; and/or
- record of poor performance such as abandoning the works, not properly completing the contract, inordinate delays in completion, litigation history, or financial failures etc.; and/or
- participated in the previous Tender for the same work and had quoted unreasonably high tender prices and could not furnish rational justification.

4. One Tender per Tenderer:

4.1 Each tenderer shall submit only one tender for one package. A tenderer who submits or participates in more than one Tender (other than as a sub-contractor or in cases of alternatives that have been permitted or requested) will cause all the proposals with the Tenderer's participation to be disqualified.

5. Cost of Tendering:

5.1 The tenderer shall bear all costs associated with the preparation and submission of his tender, and the Employer will in no case be responsible and liable for those costs.

6. Site visit:

6.1 The Tenderer at his own responsibility and risk is encouraged to visit and examine the Site of Works and its surroundings and obtain all information that may be necessary for preparing the Tender and entering into a contract for construction of the Works. The cost of visiting the Site shall be at the Tenderer's own expense.

B. Tender documents

7. Content of Tender documents

7.1 The set of tender documents shall have all the Sections given in Page 2:

7.2 Both the sets should be completed and returned with the tender.

8. Clarification of Tender Documents

8.1 A prospective tenderer requiring any clarification of the tender documents may notify the Employer in writing or by cable (hereinafter "cable" includes telex, facsimile and e-mail) at the Employer's address indicated in the invitation to tender. The Employer will respond to any request for clarification which he receives earlier than 15 days prior to the deadline for submission

of tenders. Copies of the Employer's response will be forwarded to all purchasers of the tender documents through e-mail, including a description of the enquiry but without identifying its source. Same will be available in the website of e-procurement www.kppp.karnataka.gov.in.

8.2 Pre-tender meeting:

8.2.1 **Deleted.**

8.2.2 **Deleted.**

8.2.3 **Deleted.**

8.2.4 **Deleted.**

8.2.5 **Deleted.**

9. Amendment of Tender documents

9.1 Before the deadline for submission of tenders, the Employer may modify the tender documents by issuing addenda.

9.2 Any addendum thus issued shall be part of the tender documents and shall be communicated in writing or by cable to all the purchasers of the tender documents.

9.3 To give prospective Tenderers reasonable time in which to take an addendum into account in preparing their tenders, the Employer shall extend as necessary the deadline for submission of tenders, in accordance with Sub-Clause 16.2 below.

C. Preparation of Tenders

10. Documents comprising the Tender

10.1 The tender submitted in e-procurement portal by the Tenderer shall contain the documents as follows:

- (a) Scanned copy of Earnest Money Deposit made ;
 - (b) Scanned copies of Qualification Information as per formats given in Section 3;
 - (c) The Tender (in the format indicated in Section 4)
 - (d) Priced Bill of Quantities (Section 9);
- and any other materials required to be completed and submitted by Tenderers in accordance with these instructions. The documents listed under Sections 3, 4, 6 and 9 shall be filled in without exception. The Earnest Money Deposit shall be submitted to the Tender inviting authority on or before the time of submission mentioned in IFT. PHOTOCOPIES OF THE DOCUMENTS SHOULD BE NOTARISED.

10.2 Tenderers submitting tenders together with other contracts stated in the IFT to form a package will so indicate in the tender together with any discounts offered for the award of more than one contract.

11. Tender prices

- 11.1 The contract shall be for the whole works as described in Sub-Clause 1.1, based on the priced Bill of Quantities submitted by the Tenderer.
- 11.2 The bidder shall fill in the unit rates in figures for all items of the Works described in the Bill of Quantities. The system will automatically convert the unit rates mentioned in figures to words and also calculate the amount of that item as well as the total Bid value. *Items for which no rate is entered by the bidder will not be paid for by the Employer when executed and shall be deemed covered by the other rates in the Bill of Quantities*
- 11.3 All duties, taxes, and other levies payable by the contractor under the contract, or for any other cause, shall be included in the rates, prices and total Tender Price submitted by the Tenderer.
- 11.4 Deleted

12. Tender validity

- 12.1 Tenders shall remain valid for a period not less than **ninety days** after the deadline date for tender submission specified in Clause 16. A tender valid for a shorter period shall be rejected by the Employer as non-responsive.
- 12.2 In exceptional circumstances, prior to expiry of the original time limit, the Employer may request that the Tenderers may extend the period of validity for a specified additional period. The request and the Tenderers' responses shall be made in writing or by cable **or e-mail**. A Tenderer may refuse the request without forfeiting his earnest money deposit. A Tenderer agreeing to the request will not be required or permitted to modify his tender, but will be required to extend the validity of his earnest money deposit for a period of the extension, and in compliance with Clause 13 in all respects.

13. Earnest money deposit

- 13.1 The Tenderer shall furnish, as part of his tender, earnest money deposit in the amount as shown in column 2 of the Table of IFT for this particular work. This earnest money deposit shall be in favour of **Chairman, BWSSB** and may be in the form of Banker's cheque/ Demand draft/Pay Order, in favour of **Chairman, BWSSB** payable at **BANGALORE** from any Nationalised / Scheduled Indian banks.
- 13.2 Instruments having fixed validity issued as earnest money deposit for the tender shall be valid for 45 days beyond the validity of the tender.
- 13.3 Any tender not accompanied by an acceptable earnest money deposit and not secured as indicated in Sub-Clauses 13.1 and 13.2 above shall be rejected by the Employer as non-responsive.

- 13.4 The earnest money deposit of unsuccessful Tenderers will be returned within 30 days of the end of the tender validity period specified in Sub-Clause 12.1.
- 13.5 The earnest money deposit of the successful Tenderer will be discharged when the Tenderer has signed the Agreement and furnished the required Performance Security.
- 13.6 The earnest money deposit may be forfeited:
- (a) if the Tenderer withdraws the Tender after tender opening during the period of tender validity;
 - (b) if the Tenderer does not accept the correction of the Tender Price, pursuant to Clause 24; or
 - (c) in the case of a successful Tenderer, if the Tenderer fails within the specified time limit to
 - (i) sign the Agreement; or
 - (ii) furnish the required Security deposit

14. Format and signing of Tender

- 14.1 The completed bid comprising of documents indicated in ITB 12, should be uploaded in the **e procurement portal of BWSSB** through the website www.kppp.karnataka.gov.in along with scanned copies of requisite certificates those are mentioned in different sections in the bid document and scanned copy of Bid Security / EMD in case it is provided in the form of Banker's cheque/ Demand draft/Pay Order
- 14.2 All the documents should be uploaded to the **e procurement portal of BWSSB**. Tenderer should take a print out of the declaration letter provided in the website on company letter head and should sign, stamp and upload the same to the tender wizard of BWSSB.
- 14.3 Deleted

D. Submission of Tenders

15. Up-loading & submission of tenders

- 15.1 The tenders should be uploaded only through **e-procurement portal**. Tender should contain
- A. Technical Tender consisting of following:**
- a. All the documents with required details in prescribed format; those are mentioned in different sections in the Tender. Form of Tender, Declaration statement regarding Customs/ Excise duty exemption for materials/ construction equipment brought to site as mentioned in Section 2, etc., shall be downloaded, filled with required details, signed, scanned & uploaded to the e-procurement portal website www.kppp.karnataka.gov.in/BWSSB on or before the time and date indicated in notification /Section I IFT.
 - b. **Tender security.** Tender security can be paid to BWSSB in the form of Banker's cheque/ Demand draft/Pay

Order (the details like reference number, date, name of the Bank and drawn in favour are to be registered on the tender wizard of BWSSB)

The above documents along with notarized copies of documentary evidences as indicated in Section—II ITT, Section-III Qualification information & Section IV Forms of Tender shall be scanned and uploaded to the website compulsorily, failing which tender will be rejected in view of incomplete bid document and

- B. Financial Tender consisting of Bill of Quantities (file name: BOQ.xls).** The tenderer shall download the bill of quantities and key in the rates (in figures only) in the Bill of Quantities sheet and upload the same file on to the website on or before the time and date indicated in notification /Section I IFT.

NOTE:

1. URL of the Website for tender submission through e-procurement portal is as follows:
 - i www.kppp.karnataka.gov.in.
 - ii **Engineer-in-Chief**
Bangalore Water Supply and Sewerage Board,
2nd Floor, Cauvery Bavan,
K.G.Road, Bangalore 560009
Karnataka, India.
Tel Fax; +91-80-22945105, Telephone: +91-80- 22945105
2. The details related to submission of tenders, downloading / uploading of documents or other details are available online in the help wizard, Vendor manual & FAQ of above website. The same is provided along with sample formats in Annexure-I of the Bid document for ready reference.

15.2 Deleted

15.3 Unique Identification Number will be automatically generated by the server with time - stamp and sent to the account of the bidder as an acknowledgement after bidder finally uploads the bids.

15.4 Deleted

16. Deadline for submission of the Tenders

16.1 Tenders must upload all the tender documents in the e-procurement portal no later than **11/08/2025 Upto 16.00 Hrs.** In the event of the specified date for the submission of tenders being changed / postponed by the Employer due to unforeseen circumstances, the corrigendum will be issued in the news paper & the deadline for submission of tenders will be intimated accordingly.

16.2 The Employer may extend the deadline for submission of tenders by issuing an amendment/corrigendum in accordance with Clause 9, in which case all rights and obligations of the Employer

**Contractor
Employer**

and the Tenderers previously subject to the original deadline will then be subject to the new deadline.

17. Late Tenders

17.1 The software of e-procurement system will not allow the Bidder to upload the documents after expiration of the stipulated date & time of Bid submission. The Bidder shall refer the server time, which will be displayed in the e-procurement portal of BWSSB. Employer will not be responsible for non-receipt of bids on the stipulated date & time prescribed in clause 16, due to Internet Problems, improper uploading or any other related problems. In case of connectivity problems, Tenderer may contact Helpdesk of the e-tender service provider and may also draw the attention of tender inviting authority.

18. Modification and Withdrawal of Tenders

18.1 Tenderers may “modify” and “withdraw” their tenders multiple numbers of times, until the deadline for submission of tenders by operating the relevant provision made in e-tendering. If the Tenderer withdraws the tender before the deadline for submission of tenders and later if he is interested to submit the tender once again, may do so within the stipulated date & time as mentioned in Clause 16. In this case within the stipulated date & time, the tenderer can once again submit the requisition to the officer inviting tenders for access to the withdrawn tender document for resubmission. For this tenderer need not make any additional payment towards the cost of tender document. Communication of modification / withdrawal by other means will not be accepted.

18.2 Deleted.

18.3 No Tender may be modified after the deadline for submission of Tenders.

18.4 Withdrawal or modification of a Tender between the deadline for submission of Tenders and the expiration of the original period of Tender validity specified in Clause 12.1 above or as extended pursuant to Clause 12.2 may result in the forfeiture of the earnest money deposit pursuant to Clause 13.

18.5 Tenderers may offer discounts for individual items by simply modifying the quoted unit price in the Bill of Quantities. Also, Tenderer may enter their overall discount, at specified location in the Bill of Quantities only, by submitting tender modifications in accordance with this clause. Communication of discount by other means will not be accepted.

E. Tender opening and evaluation

19. Opening of Technical portion of Tenders and evaluation to determine qualified Tenderers:

- 19.1 The Employer will open the Technical details of all the Tenders received (except those withdrawn), including modifications made pursuant to Clause 18, in the presence of the Tenderers or their representatives on **-07-2025 after 16:00 hrs.** In the event of the specified date of Tender opening being declared a holiday for the Employer, the Tenders will be opened at the appointed time and location on the next working day.
- 19.2 WITHDRAWAL proposal submitted pursuant to clause 18 shall be read out first and their bids shall not be opened.
- 19.3 The Tenderers names, the presence or absence of earnest money deposit (amount, format and validity), the submission of qualification information and such other information as the Employer may consider appropriate will be announced by the Employer at the opening.
- 19.4 The Employer shall prepare minutes of the Tender opening, including the information disclosed to those present in accordance with Sub-Clause 19.3.
- 19.5 The Price Tenders of all the Tenderers including modifications for Financial tenders can not be opened as this is programmed to open later after evaluation of the Technical details of the participating Tenderers.
- 19.6 The Employer will evaluate and determine whether each tender (a) meets the eligibility criteria defined in ITT Clause 2; (b) is accompanied by the required earnest money deposit as per stipulations in ITT Clause and (c) meets the minimum qualification criteria stipulated in ITT Clause 3. The Employer will draw out a list of qualified Tenderers.

20. Opening of Price Tender of qualified Tenderers and evaluation:

- 20.1 The Employer will inform all the Qualified Tenderers the time, date and venue fixed for the opening of the price Tenders. The Employer will open the price tender of Qualified Tenderers at the appointed time and date in the presence of the Tenders or their representatives who choose to attend. In the event of the specified date of Price tender opening being declared a holiday for the Employer, the price tenders will be opened at the appointed time and location on the next working day.
- 20.2 Deleted.
- 20.3 The Tenderers' names, the Tender prices, the total amount of each Tender, any discounts, and withdrawals, and such other details as the Employer may consider appropriate, will be announced by the Employer at the opening. No Tender shall be rejected at Tender opening.
- 20.4 The Employer shall prepare minutes of the Price Tender opening, including the information disclosed to those present in accordance with Sub-Clause 20.3.

21. Process to be confidential

- 21.1 Information relating to the examination, clarification, evaluation, and comparison of Tenders and recommendations for the award of a contract shall not be disclosed to Tenderers or any other persons not officially concerned with such process until the award to the successful Tenderer has been announced. Any effort by a Tenderer to influence the Employer's processing of Tenders or award decisions may result in the rejection of his Tender.

22 Clarifications of Tenders

- 22.1 To assist in the examination, evaluation, and comparison of Tenders, the Employer may, at his discretion, ask any Tenderer for clarification of his Tender, including breakdowns of unit rates. The request for clarification and the response shall be in writing or by cable, but no change in the price or substance of the Tender shall be sought, offered, or permitted except as required to confirm the correction of arithmetic errors discovered by the Employer in the evaluation of the Tenders in accordance with Clause 24.
- 22.2 Subject to sub-clause 22.1, no Tenderer shall contact the Employer on any matter relating to its Tender from the time of the Tender opening to the time the contract is awarded. If the Tenderer wishes to bring additional information to the notice of the Employer, it should do so in writing.
- 22.3 Any effort by the Tenderer to influence the Employer in the Employer's Tender evaluation, Tender comparison or contract award decisions may result in the rejection of the Tenderers' Tender.

23. Examination of Tenders and determination of responsiveness

- 23.1 Prior to the detailed evaluation of Tenders, the Employer will determine whether each Tender; (a) has been properly signed; and; (b) is substantially responsive to the requirements of the Tender documents like [(a)Form of Tender, (b)Declaration statement regarding Customs/ Excise duty exemption for materials/ construction equipment brought to site as mentioned in Section 2 etc.,] Scanned / uploaded [including documents those are required to be furnished as per Section 2, 3 & 4 of the tender,]; (c) is accompanied by the required securities and; (d) is substantially responsive to the requirements of the tendering documents.
- 23.2 A substantially responsive Tender is one which conforms to all the terms, conditions, and specifications of the Tender documents, without material deviation or reservation. A material deviation or reservation is one (a) which affects in any substantial way the scope, quality, or performance of the Works; (b) which limits in any substantial way, inconsistent with the Tender documents, the Employer's rights or the Tenderer's obligations under the Contract; or (c) whose rectification

would affect unfairly the competitive position of other Tenderers presenting substantially responsive Tenders.

- 23.3 If a Tender is not substantially responsive, it will be rejected by the Employer, and may not subsequently be made responsive by correction or withdrawal of the nonconforming deviation or reservation.

24. Correction of errors

- 24.1** (a) Once the Tenderer key in the rates in figures, in the Bill of quantities provided, rate in words will be auto generated by the system.
(b) Once the Tenderer key in the rates in figures, in the Bill of quantities provided, the system will automatically calculate the amount of that item as well as the total Bid value.

24.2 Deleted

25. Evaluation and comparison of Tenders

- 25.1 The Employer will evaluate and compare only the Tenders determined to be substantially responsive in accordance with Clause 23.
- 25.2 In evaluating the Tenders, the Employer will determine for each Tender the evaluated Tender Price by adjusting the Tender Price as follows:
- (a) making any correction for errors pursuant to Clause 24; and
 - (b) making appropriate adjustments to reflect discounts or other price modifications offered in accordance with Sub Clause 18.5.
- 25.3 The Employer reserves the right to accept or reject any variation, deviation, or alternative offer. Variations, deviations, and alternative offers and other factors which are in excess of the requirements of the Tender documents or otherwise result in unsolicited benefits for the Employer shall not be taken into account in Tender evaluation.
- 25.4 The estimated effect of the price adjustment conditions under Clause 41 of the Conditions of Contract, during the implementation of the Contract, will not be taken into account in tender Evaluation
- 25.5 If the tender of the successful tenderer is seriously unbalanced in relation to the Employer's estimate of the cost of the work to be performed under the contract, the Employer may require the Tenderer to produce detailed price analyses for any or all items of the Bill of Quantities, to demonstrate the internal consistency of those prices with the construction methods and schedule proposed. After evaluation of the price analyses, the Employer may require that the amount of the performance security set

forth in Clause 29 be increased at the expense of the successful Tenderer to a level sufficient to protect the Employer against financial loss in the event of default of the successful under the contract.

F. Award of Contract

26. Award criteria

- 26.1 Subject to Clause 27, the Employer will award the Contract to the Tenderer whose Tender has been determined to be substantially responsive to the Tender documents and who has offered the lowest evaluated Tender Price, provided that such Tenderer has been determined to be (a) eligible in accordance with the provisions of Clause 2, and (b) qualified in accordance with the provisions of Clause 3.

27. Employer's right to accept any Tender and to reject any or all Tenders

- 27.1 Notwithstanding Clause 26, the Employer reserves the right to accept or reject any Tender, and to cancel the Tender process and reject all Tenders, at any time prior to the award of Contract, without thereby incurring any liability to the affected Tenderer or Tenderers or any obligation to inform the affected Tenderer or Tenderers of the grounds for the Employer's action.

28. Notification of award and signing of Agreement

- 28.1 The Tenderer whose Tender has been accepted will be notified of the award by the Employer prior to expiration of the Tender validity period by cable, telex, e-mail or facsimile confirmed by registered letter. This letter (hereinafter and in the Conditions of Contract called the "Letter of Acceptance") will state the sum that the Employer will pay the Contractor in consideration of the execution, completion, and maintenance of the Works by the Contractor as prescribed by the Contract (hereinafter and in the Contract called the "Contract Price").
- 28.2 The notification of award will constitute the formation of the Contract, subject only to the furnishing of Security deposit in accordance with the provisions of Clause 29.
- 28.3 The Agreement will incorporate all agreements between the Employer and the successful Tenderer. It will be kept ready for signature of the successful Tenderer in the office of Employer within 30 days following the notification of award along with the Letter of Acceptance. Within 20 days of receipt, the successful Tenderer will sign the Agreement and deliver it to the Employer.
- 28.4 Upon the furnishing by the successful Tenderer of the Performance Security, the Employer will promptly notify the other Tenderers that their Tenders have been unsuccessful.

29. Security deposit

- 29.1 Within 20 days of receipt of the Letter of Acceptance, the successful Tenderer shall deliver to the Employer a Security deposit in any of the forms given below for an amount equivalent to 5% of the Contract price plus additional security for unbalanced tenders in accordance with Clause 25.5 of ITT and Clause 44 of the Conditions of Contract. :
- 1 - Cash or
 - 2 - Banker's cheque/Demand draft,/Pay Order in favour of **Chairman, BWSSB** payable at **Bangalore** or
 - 3 - A bank guarantee in the form given in Section 10; or
- 29.2 If the security deposit is provided by the successful Tenderer in the form of a Bank Guarantee, it shall be issued either by a nationalized/ Scheduled bank.
- 29.3 The security deposit if furnished in cash or demand draft can, if requested, be converted to interest bearing securities at the cost of the contractor.
- 29.4 Failure of the successful Tenderer to comply with the requirements of Sub-Clause 29.1 shall constitute sufficient grounds for cancellation of the award and forfeiture of the Earnest money deposit.

30 Advance Payment and Security:

- 30.1 The Employer will provide an advance payment on the contract price as stipulated in the Conditions of Contract, subject to the maximum amount as stated in the Contract Data.

31. Corrupt or Fraudulent practices

- 31.1 The GOK requires that the Tenderers/Suppliers/Contractors, observe the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this policy, GOK :
- (a) will reject a proposal for award if it determines that the Tenderer recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question;
 - (b) will declare a firm ineligible, either indefinitely or for a stated period of time, to be awarded a GOK contract if it at any time determines that the firm has engaged in corrupt or fraudulent practices in competing for, or in executing, a GOK contract.
- 31.2 Furthermore, Tenderers shall be aware of the provision stated in sub-clause 50.2 of the Conditions of Contract.

SECTION 3:
QUALIFICATION INFORMATION

The following form is to be downloaded, particulars are to be filled, scanned & uploaded by the Bidder, to the tender wizard of BWSSB "www.kppp.karnataka.gov.in" along with the Bid.

Note: The detailed procedure for downloading / uploading the documents will be available in Help wizard, Vendor manual & FAQ of the above mentioned Website.

The information to be filled in by the Tenderer hereunder will be used for purposes of computing Tender capacity as provided for in Clause 3 of the Instructions to Tenderers. This information will not be incorporated in the Contract.

- 1.1 Constitution or legal status of Tenderer [Attach copy]
Place of Registration _____
(Attach Copy)
- Principal place of business: _____
- 1.2 Total value of civil engineering construction 2020 - 21
works executed and payments received in the 2021 - 22
last five years (in Rs. Lakhs) 2022 - 23
2023 - 24
2024 - 25
- 1.3 Work performed as Prime Contractor (in the same name) on works of similar nature over during the five years specified in 1.2 above.

Project Name	Name of Employer	Description of Work	Contract Number	Value of contract Rs. Lakhs	Date of issue of work order	Specified period of completion	Actual date of completion	Remarks explaining reasons for delay in completion of work
1	2	3	4	5	6	7	8	9

- 1.4 Quantities of work executed as prime contractor (in the same name) during the last five years specified in 1.2 above:

Year	Name of Work	Name of Employer	Quantity of work performed (cum) ¹	Remarks (Indicate contract reference)
2019-20				

¹ Items of work for which data is requested should tally with that specified in ITT Clause 3

Contractor
Employer

2020-21					
2021-22					
2022-23					
2023-24					

1.5 Information on works for which Tenders have been submitted and works which are yet to be completed as on the date of this Tender.

(A) Existing commitments and on-going works:

Description of Work	Place & State	Contract No. & Date	Name and Address of Employer	Value of Contract (Rs. lakhs)	Stipulated period of completion	Value of works ² remaining to be completed (Rs. lakhs)	Anticipated date of completion
1	2	3	4	5	6	7	8

(B) Works for which Tenders already submitted:

Description of Work	Place & State	Name and Address of Employer	Estimated value of works (Rs. lakhs)	Stipulated Date period of completion	when decision is expected	Remarks if any
1	2	3	4	5	6	7

1.6. The following items of equipment are considered essential for successfully carrying out the works. The Tenderer should furnish all the information listed below.

Item of Equipment	Requirement ³			Owned and available		Remarks
	No.	Capacity	Owned	Number/ Capacity	Age/ Condition	

1.7 Reports on the financial standing of the tenderer, such as profit and loss statements and auditor's reports for the last five years;

² Contractor shall enclose / attach / up load all necessary certificates duly attested by the employer

³ The Item of equipment, required number and capacity should match with those in ITT Clause 3.3(a) (Filled scanned & uploaded)

- 1.8 Qualification and experience of the key technical and management personnel in permanent employment with the tenderer and those that are proposed to be deployed on this contract, if awarded.
- 1.9. Name, address, and telephone, telex, and fax numbers of the Tenderers' bankers who may provide references if contacted by the Employer.
- 1.10 Evidence of access to financial resources to meet the qualification requirement specified in ITT Clause 3.3 (b): Cash in hand, Letter of Credit etc. List them below and attach certificate from the Banker in the suggested format as under:

BANKER'S CERTIFICATE

This is to certify that M/s. is a reputed company with a good financial standing. If the contract for this work, namely (name of the work) is awarded to the above firm, we shall be able to provide overdraft/credit facilities to the extent of Rs. to meet the working capital requirements for executing the above contract.

Sd/-
Name of the Bank, Senior Bank
Manger
Address:

.....

- 1.11 Proposals for subcontracting components of works amounting to more than 20% of the contract price .

Item of Work	Value of Sub-Contract	Identified Sub-Contractor (Name and address)	Experience of similar work ⁴

- 1.12 Information on litigations in which the Tenderer is involved:

Other Party (ies)	Employee	Details of dispute	Amount involved	Remarks showing present status

- 1.13 The proposed methodology and program of construction, backed with equipment planning and deployment, duly supported with broad calculations and quality control procedures proposed to be adopted,

⁴ Attach Certificate from the respective Employers (scanned & Uploaded)

justifying their capability of execution and completion of the work as per technical specifications within the stipulated period of completion as per milestones.

SECTION 4:

**FORMS OF TENDER, LETTER OF
ACCEPTANCE, NOTICE TO PROCEED WITH
THE WORK AND AGREEMENT FORM**

Form of Tender

Description of the Works: **Work of Operation and maintenance of EMF Flowmeters and its allied works installed in Phase II network coming under AEE (UFW)-2 subdivision.**

Tender

To

Engineer-in-Chief,

Bangalore Water Supply and Sewerage Board,

2nd Floor, Cauvery Bavan,

K.G.Road, Bangalore 560009

GENTLEMEN,

We offer to execute the Works described above in accordance with the Conditions of Contract accompanying this Tender for the Contract Price of _____ [in figures] (_____) [in letters].⁵

This Tender and your written acceptance of it shall constitute a binding contract between us. We understand that you are not bound to accept the lowest or any Tender you receive.

The advance payment required is Rs.....

We undertake that, in competing for (and, if the award is made to us, in executing) the above contract, we will strictly observe the laws against fraud and corruption in force in India namely "Prevention of Corruption Act 1988".

We hereby confirm that this Tender complies with the Tender validity and Earnest money deposit required by the Tender documents.

We attach herewith our current income-tax clearance certificate.

Yours faithfully,

Authorized Signature:

Name & Title of Signatory:

Name of Tenderer _____

Address: -----

Letter of Acceptance

(letterhead paper of the Employer)

_____[date]

To:

[name and address of the Contractor]

Dear Sirs,

This is to notify you that your Tender dated _____ for execution
of _____ the

_____ [name of the contract and identification number, as given in the
Instructions to Tenderers] for the Contract Price of Rupees ____
(_____) [amount in words and figures], as corrected and modified in accordance with
the Instructions to Tenderers is hereby accepted by our Agency.

You are hereby requested to furnish Security deposit plus additional
security for unbalanced tenders in terms of Clause 25.5 of ITT, in the form
detailed in Clause 29.1 of ITT for an amount of Rs. _____ within 20 days
of the receipt of this letter of acceptance valid up to 30 days from the date of
expiry of Defects Liability Period i.e. up to and sign the contract,
failing which action as stated in Para 29.4 of ITT will be taken.

Yours faithfully,

Authorized Signature
Name and Title of Signatory
Name of Agency

Issue of Notice to proceed with the work

(letterhead of the Employer)

_____(date)

To

_____(name and address of the Contractor)

Dear Sirs:

Pursuant to your furnishing the requisite security deposit as stipulated
in ITT Clause 29.1 and signing of the contract agreement for the construction
of _____[name of the contract] a Tender Price of Rs. _____, you
are hereby instructed to proceed with the execution of the said works in
accordance with the contract documents.

Yours faithfully,

(Signature, name and title of signatory authorized to
sign on behalf of Employer)

Agreement Form

Agreement

This agreement, made the _____ day of _____ 20_____,
between _____

_____ [name and address of Employer] (hereinafter called “the
Employer”) of the one part and _____

_____ [name and address of
contractor] (hereinafter called “the Contractor”) of the other part.

Whereas the Employer is desirous that the Contractor execute

_____ [name and identification number of Contract] (hereinafter called “the Works”)
and the Employer has accepted the Tender by the Contractor for the execution and
completion of such Works and the remedying of any defects therein at a contract
price of Rupees.....

NOW THIS AGREEMENT WITNESSETH as follows:

1. In this Agreement, words and expression shall have the same meanings as are
respectively assigned to them in the Conditions of Contract hereinafter referred
to, and they shall be deemed to form and be read and construed as part of this
Agreement.
2. In consideration of the payments to be made by the Employer to the Contractor
as hereinafter mentioned, the Contractor hereby covenants with the Employer to
execute and complete the Works and remedy any defects therein in conformity
in all aspects with the provisions of the Contract.
3. The Employer hereby covenants to pay the Contractor in consideration of the
execution and completion of the Works and the remedying the defects wherein
the Contract Price or such other sum as may become payable under the
provisions of the Contract at the times and in the manner prescribed by the
Contract.
4. The following documents shall be deemed to form and be read and construed as
part of this Agreement, viz:
 - i) Letter of Acceptance;
 - ii) Notice to proceed with the works;
 - iii) Contractor’s Tender;
 - iv) Contract Data;
 - v) Conditions of contract (including Special Conditions of Contract);
 - vi) Specifications;
 - vii) Drawings;
 - viii) Bill of Quantities; and
 - ix) Any other document listed in the Contract Data as forming part of the
contract.

In witness whereof the parties thereto have caused this Agreement to be executed
the day and year first before written.

The Common Seal of _____
was hereunto affixed in the presence of:
Signed, Sealed and Delivered by the said

in the presence of:
Binding _____ Signature _____ of _____ Employer

Contractor
Employer

Binding Signature of Contractor _____

SECTION 5:
CONDITIONS OF CONTRACT

Table of Contents

A. General	Page No.
1. Definitions	35
2. Interpretation	36
3. Law governing contract	36
4. Employers decisions	36
5. Delegation	37
6. Communications	37
7. Subcontracting	37
8. Other Contractors	37
9. Personnel	37
10. Employer's and Contractor's risks	37
11. Employer's risks	37
12. Contractor's risks	38
13. Insurance	38
14. Site Investigation Report	39
15. Query about Contract Data	39
16. Contractor to construct the Works	39
17. The Works to be completed by Intended Completion Date	39
18. Approvals by the Employer	39
19. Safety	39
20. Discoveries	39
21. Possession of the Site	39
22. Access to the Site	40
23. Instructions	40
24. Procedure for resolution of disputes	40
B. Time Control	
25. Program	40
26. Extension of the Intended Completion Date	40
27. Delays ordered by the Employer	41
28. Management meetings	41
C. Quality Control	
29. Identifying defects	41
30. Tests	41
31. Correction of defects	41
32. Uncorrected defects	41
D. Cost Control	
33. Bill of Quantities (BOQ)	42
34. Variations	42
35. Payment for Variations	42
36. Submission of bills for payment	43
37. Payments	43
38. Compensation events	43
39. Tax	44
40. Price Adjustment	44
41. Liquidated damages	44
42. Advance Payments	45

	43. Securities	45
	44. Cost of repairs	44
E	Finishing of Contract	
	45. Completion	45
	46. Taking Over	46
	47. Final account	46
	48. As built drawings and/or Operating and Maintenance Manuals	46
	49. Termination	46
	50. Payment upon termination	47
	51. Property	47
	52. Release from performance	47
F	Special Conditions of Contract	48

Conditions of Contract

A. General

1. Definitions

- 1.1 Terms which are defined in the Contract Data are not also defined in the Conditions of Contract but keep their defined meanings. Bold letters are used to identify defined terms.

Bill of Quantities means the priced and completed Bill of Quantities forming part of the Tender.

Compensation events are those defined in Clause 38 hereunder.

The **Completion Date** is the date of completion of the Works as certified by the Employer in accordance with Sub Clause 46.1.

The **Contract** is the contract between the Employer and the Contractor to execute, complete and maintain the Works. It consists of the documents listed in Clause 2.2 below.

The **Contract Data** defines the documents and other information which comprise the Contract.

The **Contractor** is a person or corporate body whose Tender to carry out the Works has been accepted by the Employer.

The **Contractor's Tender** is the completed Tender document submitted by the Contractor to the Employer.

The **Contract price** is the price stated in the Letter of Acceptance and thereafter as adjusted in accordance with the provisions of the Contract.

Days are calendar days; months are calendar months.

A **Defect** is any part of the Works not completed in accordance with the Contract.

The **Defects liability period** is the period named in the Contract Data and calculated from the Completion Date.

The **Employer** is the party who will employ the Contractor to carry out the Works.

Equipment is the Contractor's machinery and vehicles brought temporarily to the Site to construct the Works.

The **Initial Contract price** is the Contract Price listed in the Employer's Letter of Acceptance.

The **Intended Completion Date** is the date on which it is intended that the Contractor shall complete the Works. The Intended Completion Date is specified in the Contract Data. The Intended Completion Date may be revised only by the Employer by issuing an extension of time.

Materials are all supplies, including consumables, used by the contractor for incorporation in the Works.

Plant is any integral part of the Works which is to have a mechanical, electrical, electronic or chemical or biological function.

The **Site** is the area defined as such in the Contract Data.

Specification means the Specification of the Works included in the Contract and any modification or addition made or approved by the Employer.

The **Start Date** is given in the Contract Data. It is the date when the Contractor shall commence execution of the works. It does not necessarily coincide with any of the Site Possession Dates.

A **Subcontractor** is a person or corporate body who has a Contract with the Contractor to carry out a part of the work in the Contract which includes work on the Site.

A **Variation** is an instruction given by the Employer which varies the Works.

The **Works** are what the Contract requires the Contractor to construct, install, and turn over to the Employer, as defined in the Contract Data.

2. Interpretation

- 2.1 In interpreting these Conditions of Contract, singular also means plural, male also means female or neuter, and the other way around. Headings have no significance. Words have their normal meaning under the language of the Contract unless specifically defined. The Employer will provide instructions clarifying queries about the Conditions of Contract.
- 2.2 The documents forming the Contract shall be interpreted in the following order of priority:
 - (1) Agreement
 - (2) Letter of Acceptance, notice to proceed with the works
 - (3) Contractor's Tender
 - (4) Contract Data
 - (5) Conditions of Contract
 - (6) Specifications
 - (7) Drawings
 - (8) Bill of quantities and
 - (9) any other document listed in the Contract Data as forming part of the Contract.

3. Law governing contract

- 3.1 The law governing the Contract is the Laws of India supplanted by the Karnataka Local Acts.

4. Employer's decisions

- 4.1 Except where otherwise specifically stated, the Employer will decide contractual matters between the Employer and the Contractor .

5. Delegation

- 5.1 The Employer may delegate any of his duties and responsibilities to other people after notifying the Contractor and may cancel any delegation after notifying the Contractor.

6. Communications

- 6.1 Communications between parties which are referred to in the conditions are effective only when in writing. A notice shall be effective only when it is delivered (in terms of Indian Contract Act).

7. Subcontracting

- 7.1 Deleted

8. Other Contractors

- 8.1 The Contractor shall cooperate and share the Site with other contractors, public authorities, utilities, and the Employer.

9. Personnel

- 9.1 The Contractor shall employ the technical personnel (of number and qualifications) as may be stipulated by GOK from time to time during the execution of the work. The technical staff so employed shall be available at site as may be stipulated by the Employer.
- 9.2 If the Employer asks the Contractor to remove a person who is a member of the Contractor's staff or his work force stating the reasons, the Contractor shall ensure that the person leaves the Site within seven days and has no further connection with the work in the Contract.

10. Employer's and Contractor's risks

- 10.1 The Employer carries the risks which this Contract states are Employer's risks, and the Contractor carries the risks which this Contract states are Contractor's risks.

11. Employer's risks

- 11.1 The Employer is responsible for the excepted risks which are:
- (a) rebellion, riot commotion or disorder unless solely restricted to employees of the Contractor or his Sub-Contractors arising from the conduct of the Works; or
 - (b) a cause due solely to the design of the Works, other than the Contractor's design; or
 - (c) any operation of the forces of nature (in so far as it occurs on the Site) which an experienced contractor:
 - (i) could not have reasonably foreseen; or

Contractor
Employer

- (ii) could reasonably have foreseen, but against which he could not reasonably have taken at least one of the following measures;
 - (A) prevent loss or damage to physical property from occurring by taking appropriate measures or
 - (B) insure against such loss or damage

12. Contractor's risks

12.1 All risks of loss of or damage to physical property and of personal injury and death which arise during and in consequence of the performance of the Contract other than the excepted risks are the responsibility of the Contractor.

13. Insurance:

13.1 The Contractor shall prior to commencing the works, effect and thereafter maintain insurances, in the joint names of the Employer and the Contractor, (cover from the first working day after the Start Date to the end of Defects Liability Period), in the amounts stated in the Contract Data :

- (a) for loss of or damage to the Works, Plants and Materials and the Contractor's equipment;
- (b) for liability of both Parties for loss, damage, death and injury to third parties or their property arising out of the Contractor's performance of the Contract including the Contractor's liability for damage to the Employer's property other than the Works and
- (c) for liability of both Parties and of any Employer's representative for death and injury to the Contractor's personnel except to the extent that liability arises from the negligence of the Employer, any Employer's representative or their Employees.

13.2 Policies and certificates for insurance shall be delivered by the Contractor to the Employer for his approval before the Start Date. All such insurance shall provide for compensation to be payable to rectify the loss or damage incurred. All payments received from insurers relating to loss or damage shall be held jointly by the Parties and used for the repair of the loss or damage or as compensation for loss or damage that is not to be repaired.

13.3 If the Contractor fails to effect or keep in force any of the insurances referred to in the previous sub-clauses or fails to provide satisfactory evidence, policies or receipts, the Employer may without prejudice to any other right or remedy, effect insurance for the cover relevant to such default and pay the premiums due and recover the same as a deduction from any other monies due to the Contractor. If no payment is due, the payment of the premiums shall be a debt due.

13.4 Alterations to the terms of insurance shall not be made without the approval of the Employer.

13.5 Both Parties shall comply with any conditions of the insurance policies.

14. Site Investigation Reports:

14.1 The Contractor, in preparing the tender, shall rely on any site investigation reports referred to in the Contract data, supplemented by any information available to the Tenderer.

15. Queries about the Contract Data

15.1 The Employer will clarify queries on the Contract Data.

16. Contractor to construct the Works

16.1 The Contractor shall construct the Works in accordance with the Specification and Drawings.

17. The Works to be completed by the Intended Completion Date

17.1 The Contractor may commence execution of the Works on the Start Date and shall carry out the Works in accordance with the program submitted by the Contractor, as updated with the approval of the Employer, and complete them by the Intended Completion Date.

18. Approval by the Employer:

18.1 The Contractor shall submit Specification and drawings showing the proposed Temporary Works to the Employer, who is to approve them if they comply with the Specifications and Drawings.

18.2 The Contractor shall be responsible for the design of Temporary Works

18.3 The Employer's approval shall not alter the Contractor's responsibility for design of the Temporary Works.

18.4 The Contractor shall obtain approval of third parties to the design of third parties to the design of the temporary Works where required.

18.5 All Drawings prepared by the Contractor for the execution of the temporary or permanent Works, are subject to prior approval by the Employer before their use.

19. Safety

19.1 The Contractor shall be responsible for the safety of all activities on the Site.

20. Discoveries

20.1 Anything of historical or other interest or of significant value unexpectedly discovered on the Site is the property of the Employer. The Contractor is to notify the Employer of such discoveries and carry out the Employer's instructions for dealing with them.

21. Possession of the Site

21.1 The Employer shall give possession of all parts of the Site to the Contractor. If possession of a part is not given by the date stated in the Contract Data the Employer is deemed to have delayed the start of the relevant activities and this will be Compensation Event.

Contractor
Employer

22. Access to the Site

- 22.1 The Contractor shall allow the Employer and any person authorized by the Employer access to the Site, to any place where work in connection with the Contract is being carried out or is intended to be carried out and to any place where materials or plant are being manufactured / fabricated / assembled for the works.

23. Instructions

- 23.1 The Contractor shall carry out all instructions of the Employer which comply with the applicable laws where the Site is located.

24. Procedure for resolution of Disputes:

- 24.1 If the Contractor is not satisfied with the decision taken by the Employer, the dispute shall be referred by either party to Arbitration within 30 days of the notification of the Employer's decision.
- 24.2 If neither party refers the dispute to Arbitration within the above 30 days, the Employer's decision will be final and binding.
- 24.3 The Arbitration shall be conducted in accordance with the arbitration procedure stated in the Special Conditions of Contract.

B. Time Control

25. Program

- 25.1 Within the time stated in the Contract Data the Contractor shall submit to the Employer for approval a Program showing the general methods, arrangements, order, and timing for all the activities in the Works.
- 25.2 The Employer's approval of the Program shall not alter the Contractor's obligations. The Contractor may revise the Program and submit it to the Employer again at any time. A revised Program is to show the effect of Variations and Compensation Events.

26. Extension of the Intended Completion Date

- 26.1 The Employer shall extend the Intended Completion Date if a Compensation Event occurs or a Variation is issued which makes it impossible for Completion to be achieved by the Intended Completion Date.
- 26.2 The Employer shall decide whether and by how much to extend the Intended Completion Date within 21 days of the Contractor asking the Employer for a decision upon the effect of a Compensation Event or Variation and submitting full supporting information.

27. Delays ordered by the Employer

- 27.1 The Employer may instruct the Contractor to delay the start or progress of any activity within the Works.

28. Management meetings

- 28.1 The Employer may require the Contractor to attend a management meeting. The business of a management meeting shall be to review the progress achieved and the plans for remaining work.
- 28.2 The responsibility of the parties for actions to be taken is to be decided by the Employer either at the management meeting or after the management meeting and stated in writing to be distributed to all who attended the meeting.

C. Quality Control

29. Identifying defects

- 29.1 The Employer shall check the Contractor's work and notify the Contractor of any Defects that are found. Such checking shall not affect the Contractor's responsibilities. The Employer may instruct the Contractor to search for a Defect and to uncover and test any work that the Employer considers may have a Defect

30. Tests

- 30.1 If the Employer instructs the Contractor to carry out a test not specified in the Specification to check whether any work has a Defect and the test shows that it does, the Contractor shall pay for the test and any samples. If there is no Defect the test shall be a Compensation Event.

31. Correction of defects

- 31.1 The Employer shall give notice to the Contractor of any Defects before the end of the Defects Liability Period, which begins at Completion and is defined in the Contract Data. The Defects Liability Period shall be extended for as long as Defects remain to be corrected.
- 31.2 Every time notice of a Defect is given, the Contractor shall correct the notified Defect within the length of time specified by the Employer's notice.

32. Uncorrected defects

- 32.1 If the Contractor has not corrected a Defect within the time specified in the Employer's notice, the Employer will assess the cost of having the Defect corrected, and the Contractor will pay this amount.

1

2 D. Cost Control

33. Bill of Quantities (BOQ)

- 33.1 The BOQ shall contain items for the construction, installation, testing, and commissioning work to be done by the Contractor.
- 33.2 The BOQ is used to calculate the Contract Price. The Contractor is paid for the quantity of the work done at the rate in the BOQ for each item

Contractor
Employer

34. Variations

- 34.1 The Employer shall have power to order the Contractor to do any or all of the following as considered necessary or advisable during the progress of the work by him
- (a) Increase or decrease of any item of work included in the Bill of Quantities (BOQ);
 - (b) Omit any item of work;
 - (c) Change the character or quality or kind of any item of work;
 - (d) Change the levels, lines, positions and dimensions of any part of the work;
 - (e) Execute additional items of work of any kind necessary for the completion of the works; and
 - (f) Change in any specified sequence, methods or timing of construction of any part of the work.
- 34.2 The Contractor shall be bound to carry out the work in accordance with any instructions in this connection, which may be given to him in writing by the Employer and such alteration shall not vitiate or invalidate the contract.
- 34.3 Variations shall not be made by the Contractor without an order in writing by the Employer, provided that no order in writing shall be required for increase or decrease in the quantity of an item appearing in the BOQ so long as the work executed conforms to the approved drawings.
- 34.4 The Contractor shall promptly request in writing the Employer to confirm verbal orders and the officer issuing oral instructions shall confirm it in writing within 30 days, failing which the work shall be carried out as though there is no variation. In case variation is approved, it shall be accompanied by BOQ, failing which the contractor shall be responsible for deviation, if any. Further, approval of the Board has to be obtained for the variation exceeding 5%.

35. Payments for Variations

- 35.1 Payment for increase in the quantities of an item in the BOQ up to 25% of that provided in the Bill of Quantities shall be made at the rates quoted by the Contractor.
- 35.2 For quantities in excess of 125% of the tendered quantity of an item as given in the BOQ, the Contractor shall be paid at the rate entered in or derived from in the Schedule of Rates (applicable for the area of the work and current at the time of award of contract) plus or minus the overall percentage of the original tendered rates over the current Schedule of Rates prevalent at the time of award of contract.
- 35.3 If there is no rate for the additional, substituted or altered item of the work in the BOQ, efforts would be made to derive the rates from those given in the BOQ or the Schedule of Rates (applicable for the area of the work and current at the time of award of contract) and if found feasible the payment would be made at the derived rate for the item plus or minus the overall percentage of the original tendered rates

over the current Schedule of Rates prevalent at the time of award of contract

- 35.4 If the rates for additional, substituted or altered item of work cannot be determined either as at 35.1 or 35.2 or 35.3 above, the Contractor shall be requested to submit his quotation for the items supported by analysis of the rate or rates claimed, within 7 days.
- 35.5 If the Contractor's quotation is determined unreasonable, the Employer may
order the Variation and make a change to the Contract Price which shall be based
on Employer's own forecast of the effects of the Variation on the Contractor's costs.
- 35.6 If the Employer decides that the urgency of varying the work would prevent a quotation being given and considered without delaying the work, no quotation shall be given and the Variation shall be treated as a Compensation Event.
- 35.7 Under no circumstances the Contractor shall suspend the work on the plea of non-settlement of rates for items falling under this Clause.

36. Submission of bills for payment

- 36.1 The Contractor shall submit to the Employer monthly bills of the value of the work completed less the cumulative amount paid previously.
- 36.2 The Employer shall check the Contractor's bill and determine the value of the work executed which shall comprise of (i) value of the quantities of the items in the BOQ completed and (ii) valuation of Variations and Compensation Events.
- 36.3 The Employer may exclude any item paid in a previous bill or reduce the proportion of any item previously paid in the light of later information.

37. Payments

- 37.1 Payments shall be adjusted for deductions for advance payments, other recoveries in terms of the contract and taxes, at source, as applicable under the law. The Employer shall pay the Contractor the within 60 days of submission of bill. The Contractor shall be liable to pay liquidated damages for shortfall in progress. For Progress beyond the agreed programme, payment is subject to availability of the grants.
- 37.2 Items of the Works for which no rate or price has been entered in will not be paid for by the Employer and shall be deemed covered by other rates and prices in the Contract.

38. Compensation events

- 38.1 The following are Compensation events unless they are caused by the Contractor:
- (a) The Employer does not give access to a part of the Site by the Site Possession Date stated in the Contract Data.

Contractor
Employer

- (b) The Employer orders a delay or does not issue drawings, specifications or instructions required for execution of works on time.
- (c) The Employer instructs the Contractor to uncover or to carry out additional tests upon work which is then found to have no Defects.
- (d) The Employer gives an instruction for dealing with an unforeseen condition, caused by the Employer, or additional work required for safety or other reasons.
- (e) The effect on the Contractor of any of the Employer's Risks.
- (f) The Employer unreasonably delays issuing a Certificate of Completion.
- (g) Other Compensation Events listed in the Contract Data or mentioned in the Contract.

38.2 If a Compensation Event would cause additional cost or would prevent the work being completed before the Intended Completion Date, the Contract Price shall be increased and/or the Intended Completion Date is extended. The Employer shall decide whether and by how much the Contract Price shall be increased and whether and by how much the Intended Completion Date shall be extended.

38.3 As soon as information demonstrating the effect of each Compensation event upon the Contractor's forecast cost has been provided by the Contractor, it is to be assessed by the Employer and the Contract Price shall be adjusted accordingly. If the Contractor's forecast is deemed unreasonable, the Employer shall adjust the Contract Price based on Employer's own forecast. The Employer will assume that the Contractor will react competently and promptly to the event.

38.4 The Contractor shall not be entitled to compensation to the extent that the Employer's interests are adversely affected by the Contractor not having given early warning or not having cooperated with the Employer.

39. Tax

39.1 The rates quoted by the Contractor shall be deemed to be **Exclusive of the sales and other taxes** that the Contractor will have to pay for the performance of this Contract. The Employer will perform such duties in regard to the deduction of such taxes at source as per applicable law.

40. Price Adjustment:

NA

41. Liquidated damages

41.1 The Contractor shall pay liquidated damages to the Employer at the rate per day stated in the Contract Data for each day that the Completion Date is later than the Intended Completion Date (for the whole of the works or the milestone as stated in the Contract Data). The total amount of liquidated damages shall not exceed the amount defined in the Contract Data. The Employer may deduct liquidated

damages from payments due to the Contractor. Payment of liquidated damages does not affect the Contractor's liabilities.

- 41.2 If the Intended Completion Date is extended after liquidated damages have been paid, the Employer shall correct any overpayment of liquidated damages by the Contractor by adjusting the next payment of bill.

42. Advance Payments: Deleted

- 42.1 The Employer shall make payment to the Contractor of the amounts stated in the Contract Data by the date stated in the Contract Data, against provision by the Contractor of an unconditional bank guarantee in a form acceptable to the Employer issued by a Nationalized/Scheduled Bank in amounts equal to the advance payment. The guarantee shall remain effective until the advance payment has been repaid, but the amount of the guarantee shall be progressively reduced by the amounts repaid by the Contractor. Interest will not be charged on the advance payment.
- 42.2 The Contractor is to use the advance payment only to pay for Mobilization expenses required specifically for execution of the Works. The Contractor shall demonstrate that advance payment has been used in this way by supplying copies of invoices or other documents to the Employer.
- 1 42.3 The advance payment shall be repaid by deducting proportionate amounts from payments otherwise due to the Contractor, following the schedule of completed percentages of the Works on a payment basis. No account shall be taken of the advance payment or its repayment in assessing valuation of the work done, variations, price adjustments, compensation events or liquidated damages.

43. Securities:

- 43.1 The Security deposit (including additional security for unbalanced tenders) shall be provided to the Employer no later than the date specified in the Letter of Acceptance and shall be issued in an amount and form and type of instrument acceptable to the Employer. The Security deposit shall be valid until a date 30 days from the date of expiry of Defects Liability Period and the additional security for unbalanced tenders shall be valid until a date 30 days from the date of issue of the certificate of completion.

44. Cost of Repairs:

- 44.1 Loss or damage to the Works or Materials to be incorporated in the Works between the Start Date and the end of the Defects Correction periods shall be remedied by the Contractor at the Contractor's cost if the loss or damage arises from the Contractor's acts or omissions.

E. Finishing the Contract

45. Completion

Contractor
Employer

- 45.1 The Contractor shall request the Employer to issue a Certificate of Completion of the Works and the Employer will do so upon deciding that the Work is completed.

46. Taking over

- 46.1 The Employer shall take over the Site and the Works within seven days of issuing a certificate of Completion.

47. Final account

- 47.1 The Contractor shall supply to the Employer a detailed account of the total amount that the Contractor considers payable under the Contract before the end of the Defects Liability Period. The Employer shall issue a Defect Liability Certificate and certify any final payment that is due to the Contractor within 90 days of receiving the Contractor's account if it is correct and complete. If it is not, the Employer shall issue within 90 days a schedule that states the scope of the corrections or additions that are necessary. If the Final Account is still unsatisfactory after it has been resubmitted, the Employer shall decide on the amount payable to the Contractor and make payment within 60 days of receiving the Contractor's revised account.

49. Termination

- 49.1 The Employer may terminate the Contract if the other party causes a fundamental breach of the Contract.
- 49.2 Fundamental breaches of Contract include, but shall not be limited to the following:
- (a) the Contractor stops work for 45 days when no stoppage of work is shown on the current Program and the stoppage has not been authorized by the Employer;
 - (b) The Contractor becomes bankrupt or goes into liquidation other than for a reconstruction or amalgamation;
 - (c) the Employer gives Notice that failure to correct a particular Defect is a fundamental breach of Contract and the Contractor fails to correct it within a reasonable period of time determined by the Employer;
 - (d) the Contractor does not maintain a security which is required;
 - (e) the Contractor has delayed the completion of works by the number of days for which the maximum amount of liquidated damages can be paid as defined in the Contract data; and
 - (f) if the Contractor, in the judgment of the Employer has engaged in corrupt or fraudulent practices in competing for or in the executing the Contract.

For the purpose of this paragraph : “corrupt practice” means the offering, giving, receiving or soliciting of any thing of value to influence the action of a public official in the procurement process or in contract execution. “Fraudulent practice” means a misrepresentation of facts in order to influence a procurement

process or the execution of a contract to the detriment of the Borrower, and includes collusive practice among Tenderers (prior to or after Tender submission) designed to establish Tender prices at artificial non-competitive levels and to deprive the Borrower of the benefits of free and open competition.”

- 49.3 When either party to the Contract gives notice of a breach of contract to the Employer for a cause other than those listed under Sub Clause 49.2 above, the Employer shall decide whether the breach is fundamental or not.
- 49.4 Notwithstanding the above, the Employer may terminate the Contract for convenience.
- 49.5 If the Contract is terminated the Contractor shall stop work immediately, make the Site safe and secure and leave the Site as soon as reasonably possible.

50. Payment upon Termination

- 50.1 If the Contract is terminated because of a fundamental breach of Contract by the Contractor, the Employer shall prepare bill for the value of the work done less advance payments received up to the date of the bill, less other recoveries due in terms of the contract, less taxes due to be deducted at source as per applicable law and less the percentage to apply to the work not completed as indicated in the Contract Data. Additional Liquidated Damages shall not apply. If the total amount due to the Employer exceeds any payment due to the Contractor the difference shall be a debt payable to the Employer.
- 50.2 If the Contract is terminated at the Employer's convenience or because of a fundamental breach of Contract by the Employer, the Employer shall prepare bill for the value of the work done, the reasonable cost of removal of Equipment, repatriation of the Contractor's personnel employed solely on the Works, and the Contractor's costs of protecting and securing the Works and less advance payments received up to the date of the certificate, less other recoveries due in terms of the contract, and less taxes due to be deducted at source as per applicable law and make payment accordingly.

51. Property

- 51.1 All materials on the Site, Plant, Equipment, Temporary Works and Works are deemed to be the property of the Employer, if the Contract is terminated because of a Contractor's default.

F. Special Conditions of Contract

1. Labour :

The Contractor shall, unless otherwise provided in the Contract, make his own arrangements for the engagement of all staff and labour, local or other, and for their payment, housing, feeding and transport.

Contractor
Employer

The Contractor shall, if required by the Employer, deliver to the Employer a return in detail, in such form and at such intervals as the Employer may prescribe, showing the staff and the numbers of the several classes of labour from time to time employed by the Contractor on the Site and such other information as the Employer may require.

2. Compliance with labour regulations :

During continuance of the contract, the Contractor and his sub contractors shall abide at all times by all existing labour enactments and rules made there under, regulations, notifications and bye laws of the State or Central Government or local authority and any other labour law (including rules), regulations, bye laws that may be passed or notification that may be issued under any labour law in future either by the State or the Central Government or the local authority. The Contractor shall keep the Employer indemnified in case any action is taken against the Employer by the competent authority on account of contravention of any of the provisions of any Act or rules made there under, regulations or notifications including amendments. If the Employer is caused to pay or reimburse, such amounts as may be necessary to cause or observe, or for non-observance of the provisions stipulated in the notifications/bye laws/Acts/Rules/regulations including amendments, if any, on the part of the Contractor, Employer shall have the right to deduct any money due to the Contractor including his amount of security deposit. The Employer shall also have right to recover from the Contractor any sum required or estimated to be required for making good the loss or damage suffered by the Employer.

The employees of the Contractor and the Sub-Contractor in no case shall be treated as the employees of the Employer at any point of time.

3. Protection of Environment:

The contractor shall take all reasonable steps to protect the environment on and off the Site and to avoid damage or nuisance to persons or to property of the public or others resulting from pollution, noise or other causes arising as a consequence of his methods of operation. During continuance of the contract, the contractor and his sub-contractors shall abide at all times by all existing enactments on environmental protection and rules made there under, regulations, notifications and bye-laws of the State or Central Government, or local authorities and any other law, bye-law, regulations that may be passed or notification that may be issued in this respect in future by the State or Central Government or the local authority.

4. Arbitration (Clause 24)

4.1 The procedure for arbitration shall be as follows:

- (a) In case of dispute or difference arising between the Employer and the Contractor relating to any matter arising out of or

connected with this agreement it shall be settled in accordance with the Arbitration and Conciliation Act 1996. The disputes or differences shall be referred to a Sole Arbitrator. The Sole Arbitrator shall be appointed by agreement between the parties; failing such agreement, by the Appointing Authority (any one of the Organizations as per list enclosed in Annexure)

- (b) Arbitration proceedings shall be held at **Bangalore**, Karnataka, India
- (c) The cost and expenses of arbitration proceedings will be paid as determined by the Arbitrator. However the expenses incurred by each party in connection with the preparation, presentation, etc., shall be borne by each party itself.
- (d) Performance under the contract shall continue during the arbitration proceedings and payments due the Contractor by the Employer shall not be withheld, unless they are the subject matter of the arbitration proceedings.

5 Contractor to Co-ordinate his Work with Other Contractors

- 5.1 The Contractor has to co-ordinate with the other concerned Contractors as already specified in Conditions of Contract for all such works as per the directions of Engineer in charge at no extra cost.

6 Continuation of Work:

- 6.1 In case of the death of a contractor after executing the agreement / commencement of the work, his legal heir, if any eligible registered contractor and willing, can execute and complete the work at the accepted tender rates irrespective of the cost of the work

7. Further the following conditions will also become part of the agreement which may please be noted.

- a) Rates quoted by the contractor/firm is exclusive of all taxes and duties.
- b) The Contractor/Firm should mandatorily pay by themselves the necessary Entry Tax & other applicable taxes without fail.
- c) All applicable taxes payable in respect of work shall be paid by the contractor / firm to the necessary departments.
- d) Any Outstanding amount in the form of taxes be paid including interest, penalty etc.,
- e) Details of Taxes recovered in the bills shall be collected in the prescribed forms from time to time.
- f) Materials purchased with regards to work contract, the Board will not issue e-Sugam numbers.
- g) Exemption of Excise duty, custom duty and any other claimed by the contractor / firm while purchasing material required for the work should be refunded to the Board or otherwise such amount will be recovered from the contractor / firm bills if not paid to the Board.
- h) All taxes payable in respect of work shall be paid by the contractor / firm and Board is not responsible for this.
- i) Any clarification required in this regard shall be obtained from this office during office hours.

Section 6 – Conditions of Contract

Annexure:

LIST OF ORGANIZATIONS WHO ARE CONSIDERED AS APPOINTING
AUTHORITY FOR APPOINTMENT OF ARBITRATORS³²

- 1 1. Indian Council of Arbitration, New Delhi;
- 2 2. International Centre for Alternative Disputes Resolution (India);
- 3 3. Indian Roads Congress;
- 4 4. Indian Building Congress;
- 5 5. Indian Institute of Bridge Engineers;
- 6 6. Indian Institute of Public Health Engineers;
- 7 7. Institute of Water Works

³² Add any other Organization considered suitable.

SECTION 6:
CONTRACT DATA

CONTRACT DATA

Items marked "N/A" do not apply in this Contract.

The following documents are also part of the Contract: Clause Reference

- 1 • The Schedule of Operating and Maintenance Manuals [48]
- 2
- 3 • The Methodology and Program of Construction [25]
- 4 • Site Investigation Reports [14]
- 5
- 6 • The Schedule of Key and Critical Equipment to be deployed on the work as per agreed program of construction. [25]

The Employer is :

Name: **Engineer-in-Chief, BWSSB.** [1.1]

Address: **2nd Floor, Cauvery Bhavan,
Kempegowda Road,
Bangalore 560 009
Ph: 080-22945105**

Name of authorized Representative: **Executive Engineer, UFW-2,**

Bangalore Malleshwaram,

The name and identification number of the Contract is : **Operation and maintenance of EMF Flowmeters and its allied works installed in Phase II network coming under AEE (UFW)-2 subdivision.**

The Works consist of operation and maintenance of the Flowmeters, replacement, Repair and servicing of M/s. Krohne marshall make flowmeters, Supply, installation, testing & commissioning of EMF flow meters, Supply, Installation and commissioning of RTU unit, Dismantle, transport, re-install and commission the bulk flow meters, Providing and Laying of multi-core sensor cable, Shifting of transmitter panel, Repair or replacement of existing panel for painting, Steel work, welding, Providing, laying, spreading and compacting of WMM, Providing and laying of RMC,PCC, Earth work excavation, refilling of soil and other allied works.

The start date shall be the date of issue of notice to proceed with the work. [1.1]

The Intended Completion Date for the whole of the Works is **Twenty Four (24) Months** with the following milestones [17, 26]

**Contractor
Employer**

Milestone dates:

	Physical works to be completed	Period from the date of issue of Notice to proceed with the work
Milestone 1	Complete work as per the BOQ	24 months

The Site Possession Date is: [21]

The Phase II network lines coming under AEE(UFW)-2 sub-Division. [1.1] and is defined in drawings nos.

Payment Terms.

The employer will make the payment to the items of major materials on the following terms-(Clause 43 GCC)

Bulk Flow Meters

80% of the contract price	After supply of materials, spares for Electro Magnetic Flow meter
20% of the contract price	Upon Installation, Testing, commissioning and Synchronizing the readings from all bulk flow meters to available central server

The Defects Liability Period is **365** days [31]

SECTION 7:

TECHNICAL SPECIFICATIONS

TECHNICAL SPECIFICATIONS

I GENERAL

1.1 Scope of Work.

The scope of work under this Contract includes the following:

- 1.1.1 Operation and maintenance of flowmeters and Repair and servicing of M/s. Krohne Marshall make flowmeters.
- 1.1.2 Supply, installation, testing & commissioning of EMF flow meters, Supply, Installation and commissioning of RTU unit.
- 1.1.3 Dismantle, transport, re-install and commission the bulk flow meters EMF meters, Providing and Laying of multi-core sensor cable.
- 1.1.4 Shifting of transmitter panel, Repair or replacement of existing panel for painting.
- 1.1.5 Providing and fixing Steel work welded in built up sections/ framed work,
- 1.1.6 Earth work excavation & Backfilling the trenches, restoring and making good all surfaces which are damaged during excavation.
- 1.1.7 fabricating & fixing of MS, MJ flanges, specials if necessary to suit the site condition, and construction of RCC valve cistern.
- 1.1.8 Testing and commissioning of the flow meter after installation.
- 1.1.9 All work shall be done as per the specifications. The works shall include providing all materials, equipments, labour, tools, plants, transport etc., and all other services necessary for the complete construction including necessary sub-soil investigations.
- 1.20 The alignment of the pipeline and other typical details of pipe bedding, valve chambers, thrust blocks, pipe supports, and the general arrangement of reservoir are furnished in Drawings. Further details shall be furnished in the construction drawings during the construction stage if found necessary.

2.7 Safety measures

The Contractor shall provide adequate safety measures during excavation. They shall include:

1. Barricading all sides of the open trenches.
2. Red danger lights which can be easily visible from dusk to dawn placed at an interval of 20 m.
3. Traffic signals and display boards giving direction for diversion of traffic at the appropriate places as may be directed by the Engineer.
4. Adequate safe wooden plank / board or steel plate over the trenches to facilitate crossing by the public residing on either side of the trench.
5. Round the clock watch and ward maintaining all safety regulations at the site of work and protecting the site from unauthorized intrusions.

5. TECHNICAL SPECIFICATION OF BULK FLOW METERS

- The Repair and servicing of M/s.Krohne marshall make flow meters, Equipment type: Magflow meter OPTIFLUX Primary, Equipment name: OPTIFLUX shall be carried out from OEM only.
- After repair of the said meters, the calibration report from the OEM shall be submitted.
- Proper care should be taken while transporting the repaired meters.
- The Bulk Flow meters shifted from one location shall be reinstalled and reconfigured and the data should be sent to existing server.

The replacement of bulk flow meter should be compatible to the existing server, the meters replaced shall be in-line with the specification and the data needs to be as per the latest output i.e(HART/modbus etc) and the meter installed should be made online to the existing BWSSB server.

- The flow measurement system for bulk flow measurement to be used under this contract shall be electromagnetic type meters with GPRS/GSM. Each water meter intended for a potable water supply It shall comprise two principal components, as follows:
 - A flow sensor of the electromagnetic type, which shall be suitable for installation in a buried water main. The sensor shall be connected to the main by means of PN16 flanged connections. The meter shall be suitable for installation in a flooded chamber and for being directly buried.
 - An electronic display unit This shall be installed in an above ground cabinet enclosure in a convenient location, as close as possible to the water meter.
 - The water meter shall be powered power supply at the specified voltage.

On a minimum, water meter shall be provided with the following facilities at the electronic display unit.

- integral real-time clock for date and time recording of flow data.
- Integral data logger for storing data for a minimum of 31 days.
- Serial or suitable communication port to enable data to be passed from the display Unit to display flow and pressure details
- second serial or suitable communication port for the temporary connection of a laptop/computer
- Input/output block for connecting GPRS transmitter for the transfer of all display/error codes and status functions from the electronic display urut to central SCADA system, through GPRS communication.

Contractor
Employer

- The GPRS transmitter or the modem provided shall be of HART/4-20 mA type/Modbus/Profibus, which shall work in the master mode to read the totalizer and flow rate
- Meters should be commissioned upon installation of each meter so as All data from the meter can be transferred to the central SCADA System as specified by BWSSB. PSION and Laptop, leads and appropriate software and software licenses shall be provided to facilitate configuration of the water meters and for down-loading the integral data logger for data analysis.

5.1 General Specifications for Electro Magnetic Flow Meters

- a) Full bore electromagnetic flow meter shall consist of flow sensor (i.e flow tube), flow transmitter and flow indicator and integrator and any other item required to complete the system. To avoid the effects of disturbances in the velocity profile, a straight and uninterrupted run, upstream as well as downstream from the location of the flow meter shall be provided, as required by the flow meter manufacturer and in line with the applicable standards. Contractor shall finalize the exact location of flow meter in consultation with Engineer
- b) Flow measurement shall not be affected by physical properties of water viz., temperature, pressure etc., within given limits. Contractor shall provide compensating electronic circuits, if required
- c) A lockable enclosure shall be provided for the flow transmitter cum computing unit
- d) Flow meters shall be suitable for the water turbidity at site during various seasons. Flow tube shall be rugged in construction and shall be suitable for continuous operation. Flow tube shall have waterproof construction and shall be suitable for installation on underground/above ground pipe lines.
- e) The flow computer and transmitter shall be a single unit suitable for field mounting. It shall accept inputs from flow tube process the signals and shall provide an output proportional to the flow rate The output shall be 4-20 mA

SECTION 8:
DRAWINGS

SECTION 9:

BILL OF QUANTITIES

Note:

- (1) Item for which no rate or price has been entered in will not be paid for by the Employer when executed and shall be deemed covered by the other rates and prices in the Bill of Quantities (refer: ITB Clause 11.2 and CC Clause 37.2).
- (2) Unit rates and prices shall be quoted by the Tenderer in Indian Rupees.
- (3) Where there is a discrepancy between the rate in figures and words, the lower of the two will govern. [ITT Clause 24.1(a)]
- (4) Where there is a discrepancy between the unit rate and the line item total resulting from multiplying the unit rate by quantity, the unit rate quoted shall govern [ITT Clause 24.1 (b)]

SECTION 10: FORMAT OF BANK GUARANTEE FOR SECURITY DEPOSIT

To: _____ [name of Employer]

_____ [address of Employer]

WHEREAS _____ [name and address of Contractor]
(hereinafter called "the Contractor") has undertaken, in pursuance of
Contract No. _____ dated _____ to execute
_____ [name of Contract and brief description of Works]
(hereinafter called "the Contract");

AND WHEREAS it has been stipulated by you in the said Contract that the Contractor shall furnish you with a Bank Guarantee by a recognized bank for the sum specified therein as security for compliance with his obligations in accordance with the Contract;

AND WHEREAS we have agreed to give the Contractor such a Bank Guarantee;

NOW THEREFORE we hereby affirm that we are the Guarantor and responsible to you, on behalf of the Contractor, up to a total of
Rs. _____ [amount of guarantee]

⁶³ Rupees _____ [in words], and
we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of _____ [amount of guarantee]⁶⁴ as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the Contractor before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the Contract or of the Works to be performed there under or of any of the Contract documents which may be made between you and the Contractor shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition or modification.

This guarantee shall be valid until 30 days from the date of expiry of the Defects Liability Period.

Signature and seal of the guarantor _____

Name of Bank _____

Address _____

Date _____

⁶³ An amount shall be inserted by the Guarantor, representing the percentage of the Contract Price specified in the Contract

⁶⁴ An amount shall be inserted by the Guarantor, representing the percentage of the Contract Price specified in the Contract